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ABSTRACT

Developed through a modified DACUM (Developing a Curriculum) process involving business, industry, labor, and community agency representatives in Ohio, this document is a comprehensive and verified employer competency profile for industrial maintenance occupations. The list contains units (with and without subunits), competencies, and competency builders that identify the skills needed to enter these occupations. The occupational, academic, and employability skills for this occupation or occupational area are included. Within the outline are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests. Advancing items identify the knowledge, skills, and attitudes needed to advance in the occupation; futuring items identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation 3 to 4 years from now. This profile contains 11 units: safety; equipment installation; maintain equipment and practice predictive maintenance; electricity; hydraulics and pneumatics; machine trades; welding; heating, ventilation, and air conditioning; carpentry; plumbing and pipefitting; and employability skills. (NLA)

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OCAP

OHIO'S COMPETENCY ANALYSIS PROFILE

ED345062

INDUSTRIAL MAINTENANCE

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CE 061 156

Ohio's Future at Work
Division of Vocational and Career Education
Ohio Department of Education

Vocational Instructional Materials Laboratory
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THE OHIO STATE UNIVERSITY

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What is OCAP?

"A comprehensive and verified employer competency list will be developed and kept current for each program." This is the second objective of Imperative 3 of the *Action Plan for Accelerating the Modernization of Vocational Education: Ohio's Future at Work*. Ohio's Competency Analysis Profile (OCAP) lists are the Division of Vocational and Career Education's response to that objective. OCAP lists evolve from a modified DACUM process involving business, industry, labor, and community agency representatives from throughout Ohio. The OCAP process is directed by the Vocational Instructional Materials Laboratory at The Ohio State University's Center on Education and Training for Employment.

How is OCAP used?

Each OCAP contains units (with and without subunits), competencies, and competency builders that identify the occupational, academic*, and employability skills needed to enter a given occupation or occupational area. Within that outline there are three levels of items: core, advancing, and futuring. Core items identify the knowledge, skills, and attitudes essential for entry-level employment. These items are required to be taught and will be the basis for questions on the state vocational competency tests (scheduled to begin in school year 1993-94). Advancing items (marked with one asterisk) identify the knowledge, skills, and attitudes needed to advance in a given occupation. Futuring items (marked with two asterisks) identify the knowledge, skills, and attitudes needed to enter and remain in a given occupation three to four years from now.

School districts may add as many units, subunits, competencies, and/or competency builders as desired to reflect local employment needs, trends, and specialties. Local advisory committees should be actively involved in the identification and verification of additional items. Using OCAP lists, instructors will be able to formulate their vocational courses of study and monitor competency gains via the new criterion-referenced competency testing program that will be directly tied to the competencies identified on the OCAP lists.

***Academic competencies have not been identified for all OCAPs. At a later date math, communication, and science competencies will be released.**

The **Employability Skills** portion of this list was verified by the following employer panel:

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OHIO COMPETENCY ANALYSIS PROFILE

INDUSTRIAL MAINTENANCE

UNIT 1: Safety

COMPETENCY 1.0.1: Comply with local, state, and federal safety regulations and codes

COMPETENCY BUILDERS:

1.0.1.1 Interpret building codes
1.0.1.2 Follow state fire marshal regulations
1.0.1.3 Follow Occupational Safety and Health Administration (OSHA) guidelines
1.0.1.4 Follow Environmental Protection Agency (EPA) guidelines
1.0.1.5 Identify emergency response procedures*
1.0.1.6 Acquire cardiopulmonary resuscitation (CPR) certification*

COMPETENCY 1.0.2: Maintain safe work area

COMPETENCY BUILDERS:

1.0.2.1 Perform and document routine safety inspections
1.0.2.2 Identify potentially hazardous materials
1.0.2.3 Locate and correct hazards
1.0.2.4 Document accidents
1.0.2.5 Document repairs
1.0.2.6 Demonstrate lockout procedures
1.0.2.7 Demonstrate basic first-aid techniques

UNIT 2: Equipment Installation

COMPETENCY 2.0.1: Prepare for equipment installation

COMPETENCY BUILDERS:

2.0.1.1 Identify equipment requirements
2.0.1.2 Identify symbols
2.0.1.3 Read drawings and schematics
2.0.1.4 Revise drawings and blueprints*
2.0.1.5 Interpret blueprints
2.0.1.6 Prepare site
2.0.1.7 Use measuring devices

*Advancing
**Futuring

COMPETENCY 2.0.2: Move equipment using jacks, bars, and crib blocks

COMPETENCY BUILDERS:

2.0.2.1 Use safe rigging procedures
2.0.2.2 Use safe moving procedures
2.0.2.3 Use surveying equipment*
2.0.2.4 Use laser technology**

COMPETENCY 2.0.3: Install bearings and seals and align equipment

COMPETENCY BUILDERS:

2.0.3.1 Remove and replace bearings
2.0.3.2 Remove and replace seals
2.0.3.3 Use laser alignment*
2.0.3.4 Shrink or expand bearings*
2.0.3.5 Install bearings using thermal techniques*

COMPETENCY 2.0.4: Apply industrial lubricants

COMPETENCY BUILDERS:

2.0.4.1 Interpret operator's manual
2.0.4.2 Identify basic principles of lubrication
2.0.4.3 Identify characteristics of additives, grease, lubricants, and oils
2.0.4.4 Identify common applications of oil, grease, and other lubricants
2.0.4.5 Identify lubrication systems

COMPETENCY 2.0.5: Fabricate and install safety guards for equipment

COMPETENCY BUILDERS:

2.0.5.1 Measure materials
2.0.5.2 Cut and form materials

*Advancing
**Futuring

UNIT 3: Maintain Equipment and Practice Predictive Maintenance

COMPETENCY 3.0.1: Inspect and troubleshoot machine systems

COMPETENCY BUILDERS:

3.0.1.1 Apply predictive maintenance measures
3.0.1.2 Apply preventive maintenance measures
3.0.1.3 Use computer to log machine histories*
3.0.1.4 Apply statistic process control technology*
3.0.1.5 Inspect and troubleshoot linkages and lever mechanisms
3.0.1.6 Inspect and troubleshoot drive couplings
3.0.1.7 Inspect and troubleshoot clutches
3.0.1.8 Inspect and troubleshoot roller ball bearings

COMPETENCY 3.0.2: Inspect and troubleshoot mechanical drive systems

COMPETENCY BUILDERS:

3.0.2.1 Inspect and troubleshoot open gear and gear box drives
3.0.2.2 Inspect and troubleshoot belt and variable speed drives
3.0.2.3 Inspect and troubleshoot chain drives

UNIT 4: Electricity

COMPETENCY 4.0.1: Install electrical service

COMPETENCY BUILDERS:

4.0.1.1 Interpret National Electric Code (NEC) and state and local electrical codes
4.0.1.2 Interpret drawings and schematics
4.0.1.3 Install system
4.0.1.4 Determine power distribution (including high-voltage)*
4.0.1.5 Use electrical test equipment
4.0.1.6 Remove and replace fuses, breakers, and fusible links

*Advancing
**Futuring

COMPETENCY 4.0.2: Install and rough-in wiring

COMPETENCY BUILDERS:

4.0.2.1 Interpret schematics
4.0.2.2 Locate and install electrical boxes
4.0.2.3 Use electrical test equipment
4.0.2.4 Install overhead service
4.0.2.5 Lay out conduit runs
4.0.2.6 Install conduit runs
4.0.2.7 Pull conductors
4.0.2.8 Install ground bonding systems
4.0.2.9 Finish and inspect rough installation

COMPETENCY 4.0.3: Finish wiring

COMPETENCY BUILDERS:

4.0.3.1 Install plugs and switches
4.0.3.2 Install and connect fixtures
4.0.3.3 Install overcurrent protection
4.0.3.4 Test and label circuits
4.0.3.5 Update prints, schematics, and blueprints

COMPETENCY 4.0.4: Demonstrate knowledge of motors and motor controls

COMPETENCY BUILDERS:

4.0.4.1 Check motor using diagnostic instruments
4.0.4.2 Install motor
4.0.4.3 Connect motor to motor controls
4.0.4.4 Reverse motor
4.0.4.5 Connect motor to load

COMPETENCY 4.0.5: Demonstrate knowledge of programmable controllers

COMPETENCY BUILDERS:

4.0.5.1 Interface motor to controls
4.0.5.2 Program machine operations
4.0.5.3 Develop programmable ladder-logic program
4.0.5.4 Troubleshoot programmable controller ladder-logic program

*Advancing
**Futuring

COMPETENCY 4.0.6: Maintain electrical systems

COMPETENCY BUILDERS:

4.0.6.1 Replace electrical cords
4.0.6.2 Replace batteries
4.0.6.3 Replace fuse
4.0.6.4 Replace switches
4.0.6.5 Replace plugs and sockets

UNIT 5: Hydraulics and Pneumatics

COMPETENCY 5.0.1: Set up hydraulic system

COMPETENCY BUILDERS:

5.0.1.1 Interpret hydraulic and pneumatic diagrams
5.0.1.2 Determine flow rate and pressure
5.0.1.3 Determine measurements
5.0.1.4 Install pressure gauges
5.0.1.5 Install filters
5.0.1.6 Install direct control pressure-relief valve
5.0.1.7 Install directional-control valve
5.0.1.8 Install check valve
5.0.1.9 Install single-acting cylinder
5.0.1.10 Install double-acting cylinder
5.0.1.11 Install pilot-controlled check valve
5.0.1.12 Install flow control valve
5.0.1.13 Install two-way control valve
5.0.1.14 Install variable return orifice check valve
5.0.1.15 Check flow resistance
5.0.1.16 Set up 4-way, three directional control valve
5.0.1.17 Set up differential bypass control
5.0.1.18 Set up pilot-controlled pressure-relief valve
5.0.1.19 Set up sequence valve
5.0.1.20 Set up regenerative feed control
5.0.1.21 Set up hydraulic motor
5.0.1.22 Install hydraulic lines
5.0.1.23 Install gear pumps
5.0.1.24 Install and charge accumulator
5.0.1.25 Install heat exchanger
5.0.1.26 Use air-logic controllers*
5.0.1.27 Acquire National Fluid Power Association certification**

*Advancing
**Futuring

COMPETENCY 5.0.2: Set up air system

COMPETENCY BUILDERS:

5.0.2.1 Determine air-system needs
5.0.2.2 Determine load
5.0.2.3 Determine cubic feet per minute (CFM)
5.0.2.4 Install filter and dryer
5.0.2.5 Install relief valve
5.0.2.6 Set up single-acting cylinder with return spring
5.0.2.7 Install control valve
5.0.2.8 Install variable flow control
5.0.2.9 Install quick exhaust valve
5.0.2.10 Install shuttle valve
5.0.2.11 Install two-pressure valve
5.0.2.12 Install double-acting cylinder
5.0.2.13 Install air-throttling valve
5.0.2.14 Install time-delay valve
5.0.2.15 Maintain proportioning and servo valves*

UNIT 6: Machine Trades

COMPETENCY 6.0.1: Maintain machinery

COMPETENCY BUILDERS:

6.0.1.1 Interpret operator's and manufacturer's manuals
6.0.1.2 Demonstrate knowledge of individual machines
6.0.1.3 Develop operation standards sheet
6.0.1.4 Troubleshoot and diagnose malfunctions
6.0.1.5 Perform lockout/tagout procedure
6.0.1.6 Disassemble defective section
6.0.1.7 Prepare and clean equipment for reassembly
6.0.1.8 Repair or replace defective parts
6.0.1.9 Test machine for performance

COMPETENCY 6.0.2: Measure materials

COMPETENCY BUILDERS:

6.0.2.1 Use scale, calipers, protractor, combination set, micrometer, vernier calipers, and other measuring instruments
6.0.2.2 Use metric system*
6.0.2.3 Check hole diameter
6.0.2.4 Check with dial indicator

*Advancing
**Futuring

COMPETENCY 6.0.3: Perform bench operations

COMPETENCY BUILDERS:

6.0.3.1 Use measuring instruments and hand tools
6.0.3.2 Deburr workpiece
6.0.3.3 Lay out workpiece
6.0.3.4 Drill hole
6.0.3.5 Hand tap hole
6.0.3.6 Cut threads with die

COMPETENCY 6.0.4: Operate metal cutting saw

COMPETENCY BUILDERS:

6.0.4.1 Transfer dimensions from blueprint
6.0.4.2 Clean and lubricate metal cutting saw
6.0.4.3 Install and adjust guides
6.0.4.4 Weld saw blade
6.0.4.5 Install saw blade
6.0.4.6 Cut metal
6.0.4.7 Apply basic metallurgy technology*

COMPETENCY 6.0.5: Operate drill press

COMPETENCY BUILDERS:

6.0.5.1 Clean and lubricate drill press
6.0.5.2 Mount part
6.0.5.3 Select proper bit and speed
6.0.5.4 Drill part
6.0.5.5 Countersink

COMPETENCY 6.0.6: Operate pedestal grinder

COMPETENCY BUILDERS:

6.0.6.1 Clean and lubricate pedestal grinder
6.0.6.2 Check wheel for defects and speed verification
6.0.6.3 Mount wheel
6.0.6.4 Position guard and rest
6.0.6.5 Dress wheel
6.0.6.6 Sharpen drill bit

*Advancing
**Futuring

COMPETENCY 6.0.7: Operate lathe

COMPETENCY BUILDERS:

6.0.7.1 Clean and lubricate lathe
6.0.7.2 Sharpen tools
6.0.7.3 Mount workpiece
6.0.7.4 Use dial indicator
6.0.7.5 Position guards
6.0.7.6 Select feed(s) and speed(s)
6.0.7.7 Face workpiece
6.0.7.8 Turn shaft
6.0.7.9 Turn taper
6.0.7.10 Knurl workpiece
6.0.7.11 Cut off workpiece
6.0.7.12 Center drill hole
6.0.7.13 Cut threads
6.0.7.14 Turn inside bore

COMPETENCY 6.0.8: Operate milling machine

COMPETENCY BUILDERS:

6.0.8.1 Clean and lubricate milling machine
6.0.8.2 Mount workpiece
6.0.8.3 Mount tool
6.0.8.4 Mill surface
6.0.8.5 Mill keyway
6.0.8.6 Drill workpiece
6.0.8.7 Bore with milling machine
6.0.8.8 Mill an angle

COMPETENCY 6.0.9: Operate surface grinder

COMPETENCY BUILDERS:

6.0.9.1 Clean and lubricate surface grinder
6.0.9.2 Check wheel for defects and speed verification
6.0.9.3 Mount wheel and position guard
6.0.9.4 Dress wheel
6.0.9.5 Mount workpiece
6.0.9.6 Set surface grinder

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**Futuring

COMPETENCY 6.0.10: Perform flame cutting

COMPETENCY BUILDERS:

6.0.10.1 Wear safety goggles and proper clothing
6.0.10.2 Set up equipment
6.0.10.3 Preheat equipment
6.0.10.4 Make cut
6.0.10.5 Torchcut shapes
6.0.10.6 Shut down equipment and bleed lines

COMPETENCY 6.0.11: Perform oxyacetylene welding

COMPETENCY BUILDERS:

6.0.11.1 Wear safety goggles and proper clothing
6.0.11.2 Set up tanks and regulators
6.0.11.3 Adjust regulator and torch
6.0.11.4 Determine joint design
6.0.11.5 Select filler rod
6.0.11.6 Push puddle
6.0.11.7 Fuse weld joints
6.0.11.8 Weld mild steel
6.0.11.9 Weld cast iron
6.0.11.10 Braze mild steel
6.0.11.11 Braze cast iron
6.0.11.12 Replace oxyacetylene tanks

UNIT 7: Welding

COMPETENCY 7.0.1: Perform arc welding

COMPETENCY BUILDERS:

7.0.1.1 Wear welding hood and proper clothing
7.0.1.2 Identify welding symbols and interpret drawings
7.0.1.3 Set up arc welding equipment
7.0.1.4 Determine joint
7.0.1.5 Select electrode and adjust welder
7.0.1.6 Weld in all positions
7.0.1.7 Clean weld
7.0.1.8 Perform welds on alloy metals*
7.0.1.9 Perform plasma arc welding*
7.0.1.10 Perform plasma arc cutting*
7.0.1.11 Acquire American Welding Society certification*

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COMPETENCY 7.0.2: Perform gas tungsten arc welding (GTAW)

COMPETENCY BUILDERS:

7.0.2.1 Set up equipment for GTAW
7.0.2.2 GTAW stainless steel
7.0.2.3 GTAW mild steel
7.0.2.4 GTAW aluminum

COMPETENCY 7.0.3: Perform gas metal arc welding (GMAW)

COMPETENCY BUILDERS:

7.0.3.1 Set up equipment for GMAW
7.0.3.2 GMAW stainless steel
7.0.3.3 GMAW mild steel
7.0.3.4 GMAS aluminum

COMPETENCY 7.0.4: Fabricate components

COMPETENCY BUILDERS:

7.0.4.1 Lay out design
7.0.4.2 Measure materials
7.0.4.3 Make pattern and/or prototype
7.0.4.4 Use hand tools
7.0.4.5 Cut materials
7.0.4.6 Farm materials
7.0.4.7 Spot weld and use fasteners

UNIT 8: Heating, Ventilation, and Air Conditioning

COMPETENCY 8.0.1: Repair refrigeration unit

COMPETENCY BUILDERS:

8.0.1.1 Interpret operator's manual
8.0.1.2 Use gauges to check head and suction pressure
8.0.1.3 Troubleshoot refrigeration unit
8.0.1.4 Test for leaks
8.0.1.5 Replace compressor
8.0.1.6 Install tube connections
8.0.1.7 Install expansion valve
8.0.1.8 Install temperature valve
8.0.1.9 Install pressure valve
8.0.1.10 Evacuate system
8.0.1.11 Charge system
8.0.1.12 Reclaim refrigerant*
8.0.1.13 Acquire local license*

*Advancing
**Futuring

COMPETENCY 8.0.2: Maintain forced-air heating and ventilation systems

COMPETENCY BUILDERS:

8.0.2.1 Interpret operator's manual
8.0.2.2 Perform preventive maintenance
8.0.2.3 Troubleshoot forced-air control systems
8.0.2.4 Troubleshoot gas system components

UNIT 9: Carpentry

COMPETENCY 9.0.1: Perform carpentry operations

COMPETENCY BUILDERS:

9.0.1.1 Interpret drawings
9.0.1.2 Measure materials
9.0.1.3 Use metric system*
9.0.1.4 Use hand tools
9.0.1.5 Use power tools

COMPETENCY 9.0.2: Perform carpentry procedures

COMPETENCY BUILDERS:

9.0.2.1 Cut materials
9.0.2.2 Construct forms
9.0.2.3 Erect scaffolds
9.0.2.4 Construct pallets
9.0.2.5 Repair overhead doors
9.0.2.6 Install lock set, hinges, and door closures
9.0.2.7 Install metal studs*

*Advancing
**Futuring

UNIT 10: Plumbing and Pipefitting

COMPETENCY 10.0.1: Maintain and repair plumbing

COMPETENCY BUILDERS:

10.0.1.1 Interpret drawings
10.0.1.2 Maintain faucets and valves
10.0.1.3 Install water closets
10.0.1.4 Install and maintain traps and drains
10.0.1.5 Install and maintain water pumps
10.0.1.6 Install gas and electric water heaters
10.0.1.7 Install gas lines
10.0.1.8 Perform leak tests
10.0.1.9 Insulate pipes
10.0.1.10 Perform back-flow test procedures*

COMPETENCY 10.0.2: Prepare and install piping systems

COMPETENCY BUILDERS:

10.0.2.1 Interpret drawings
10.0.2.2 Measure and cut stock
10.0.2.3 Cut, ream, and thread pipe
10.0.2.4 Sweat copper pipe
10.0.2.5 Weld pipe
10.0.2.6 Install process piping
10.0.2.7 Acquire high-pressure welding certification*

COMPETENCY 10.0.3: Maintain boilers

COMPETENCY BUILDERS:

10.0.3.1 Interpret operator's manual
10.0.3.2 Prepare boiler for annual inspection
10.0.3.3 Replace or install pipe insulation
10.0.3.4 Install pressure-relief valve
10.0.3.5 Replace or install cleanout plugs
10.0.3.6 Prepare surfaces for seals and gaskets
10.0.3.7 Install filters
10.0.3.8 Install pipes, tubes, and fittings
10.0.3.9 Install and repair steam traps
10.0.3.10 Perform water test
10.0.3.11 Verify ignition system

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**Futuring

UNIT 11: Employability Skills

SUBUNIT 11.1: Career Development

COMPETENCY 11.1.1: Investigate career options

COMPETENCY BUILDERS:

11.1.1.1 Determine interests and aptitudes
11.1.1.2 Identify career options
11.1.1.3 Research occupations matching interests and aptitudes
11.1.1.4 Select career(s) that best match(es) interests and aptitudes
11.1.1.5 Identify advantages and disadvantages of career options, including nontraditional careers
11.1.1.6 Assess differences in wages, annual incomes, and job opportunities based on geographic location
11.1.1.7 Develop a career plan

COMPETENCY 11.1.2: Analyze potential barriers to employment

COMPETENCY BUILDERS:

11.1.2.1 Identify common barriers to employment
11.1.2.2 Develop strategies to overcome employment barriers

UNIT 11: Employability Skills

SUBUNIT 11.2: Decision Making and Problem Solving

COMPETENCY 11.2.1: Apply decision-making techniques in the workplace

COMPETENCY BUILDERS:

11.2.1.1 Identify the decision to be made
11.2.1.2 Compare alternatives
11.2.1.3 Determine consequences of each alternative
11.2.1.4 Make decisions based on values and goals
11.2.1.5 Evaluate the decision made

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COMPETENCY 11.2.2: Apply problem-solving techniques in the workplace

COMPETENCY BUILDERS:

11.2.2.1 Diagnose the problem and its causes
11.2.2.2 Identify alternatives and their consequences in relation to the problem
11.2.2.3 Examine multicultural and nonsexist dimensions of problem solving
11.2.2.4 Utilize resources to explore possible solutions to the problem
11.2.2.5 Compare and contrast the advantages and disadvantages of each solution
11.2.2.6 Determine appropriate action
11.2.2.7 Evaluate results

UNIT 11: Employability Skills

SUBUNIT 11.3: Work Ethic

COMPETENCY 11.3.1: Evaluate the relationship of self-esteem to work ethic

COMPETENCY BUILDERS:

11.3.1.1 Identify special characteristics and abilities in self and others
11.3.1.2 Identify internal and external factors that affect self-esteem

COMPETENCY 11.3.2: Analyze the relationship of personal values and goals to work ethic both in and out of the workplace

COMPETENCY BUILDERS:

11.3.2.1 Distinguish between values and goals
11.3.2.2 Determine the importance of values and goals
11.3.2.3 Evaluate how values affect goals
11.3.2.4 Identify short-term and long-term goals
11.3.2.5 Prioritize personal goals
11.3.2.6 Describe how personal values are reflected in work ethic
11.3.2.7 Describe how interactions in the workplace affect personal work ethic
11.3.2.8 Examine how life changes affect personal work ethic

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COMPETENCY 11.3.3: Demonstrate work ethic

COMPETENCY BUILDERS:

11.3.3.1 Examine factors that influence work ethic
11.3.3.2 Exhibit characteristics that reflect an appropriate work ethic

UNIT 11: Employability Skills

SUBUNIT 11.4: Job-Seeking Skills

COMPETENCY 11.4.1: Prepare for employment

COMPETENCY BUILDERS:

11.4.1.1 Identify traditional and nontraditional employment sources
11.4.1.2 Utilize employment sources
11.4.1.3 Research job opportunities, including nontraditional careers
11.4.1.4 Interpret equal employment opportunity laws
11.4.1.5 Explain the critical importance of personal appearance, hygiene, and demeanor throughout the employment process
11.4.1.6 Prepare for generic employment tests and those specific to an occupation/organization

COMPETENCY 11.4.2: Design a résumé

COMPETENCY BUILDERS:

11.4.2.1 Identify personal strengths and weaknesses
11.4.2.2 List skills and/or abilities, career objective(s), accomplishments/achievements, educational background, and work experience
11.4.2.3 Demonstrate legible written communication skills using correct grammar, spelling, and concise wording
11.4.2.4 Complete résumé using various formats
11.4.2.5 Secure references

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COMPETENCY 11.4.3: Complete and process job application forms

COMPETENCY BUILDERS:

11.4.3.1 Explain the importance of an application form
11.4.3.2 Identify ways to obtain job application forms
11.4.3.3 Describe methods for handling illegal questions on job application forms
11.4.3.4 Demonstrate legible written communications skills using correct grammar, spelling, and concise wording
11.4.3.5 Return application to proper person, request interview, and follow up

COMPETENCY 11.4.4: Demonstrate interviewing skills

COMPETENCY BUILDERS

11.4.4.1 Investigate interview environment and procedures
11.4.4.2 Explain the critical importance of personal appearance, hygiene, and demeanor
11.4.4.3 Demonstrate question and answer techniques
11.4.4.4 Demonstrate methods for handling difficult and/or illegal interview questions

COMPETENCY 11.4.5: Secure employment

COMPETENCY BUILDERS:

11.4.5.1 Identify present and future employment opportunities within an occupation/organization
11.4.5.2 Research the organization/company
11.4.5.3 Use follow-up techniques to enhance employment potential
11.4.5.4 Compare and evaluate job offers

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UNIT 11: Employability Skills

SUBUNIT 11.5: Job Retention Skills

COMPETENCY 11.5.1: Analyze the organizational structure of the workplace

COMPETENCY BUILDERS:

11.5.1.1 Identify and evaluate employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
11.5.1.2 Be aware of and obey all company policies and procedures
11.5.1.3 Examine the role/relationship between employee and employer
11.5.1.4 Recognize opportunities for advancement and reasons for termination

COMPETENCY 11.5.2: Maintain positive relations with others

COMPETENCY BUILDERS:

11.5.2.1 Exhibit appropriate work habits and attitude
11.5.2.2 Identify behaviors to establish successful working relationships
11.5.2.3 Cooperate and compromise through teamwork and group participation
11.5.2.4 Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age

UNIT 11: Employability Skills

SUBUNIT 11.6: Job Advancement

COMPETENCY 11.6.1: Analyze opportunities for personal and career growth

COMPETENCY BUILDERS:

11.6.1.1 Determine opportunities within an occupation/organization
11.6.1.2 Compare and contrast other opportunities
11.6.1.3 List benefits of job advancement
11.6.1.4 Evaluate factors involved when assuming a new position within or outside an occupation/organization

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COMPETENCY 11.6.2: Exhibit characteristics needed for advancement

COMPETENCY BUILDERS:

11.6.2.1 Display a positive attitude
11.6.2.2 Demonstrate knowledge of a position
11.6.2.3 Perform quality work
11.6.2.4 Adapt to changing situations and technology
11.6.2.5 Demonstrate capability for different positions
11.6.2.6 Participate in continuing education/training programs
11.6.2.7 Respect, accept, and work with ALL individuals in the workplace

UNIT 11: Employability Skills

SUBUNIT 11.7: Technology in the Workplace

COMPETENCY 11.7.1: Assess the impact of technology in the workplace

COMPETENCY BUILDERS:

11.7.1.1 Cite how past business/industry practices have influenced present business/industry processes
11.7.1.2 Investigate the use of technology in the workplace
11.7.1.3 Analyze how present skills can be applied to learning new technologies

COMPETENCY 11.7.2: Use a variety of technological applications

COMPETENCY BUILDERS:

11.7.2.1 Explore basic mathematical, scientific, computer, and technological principles
11.7.2.2 Use technology to accomplish assigned tasks
11.7.2.3 Create solutions to problems using technical means

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UNIT 11: Employability Skills

SUBUNIT 11.8: Lifelong Learning

COMPETENCY 11.8.1: Apply lifelong learning to individual situations

COMPETENCY BUILDERS:

11.8.1.1 Define lifelong learning
11.8.1.2 Identify factors that cause the need for lifelong learning

COMPETENCY 11.8.2: Adapt to change

COMPETENCY BUILDERS:

11.8.2.1 Analyze the effects of change
11.8.2.2 Identify reasons why goals change
11.8.2.3 Describe the importance of flexibility when reevaluating goals
11.8.2.4 Evaluate the need for continuing education/training

UNIT 11: Employability Skills

SUBUNIT 11.9: Economic Education

COMPETENCY 11.9.1: Analyze global enterprise systems

COMPETENCY BUILDERS:

11.9.1.1 Identify characteristics of various enterprise systems
11.9.1.2 Examine the relationship between competition, risk, and profit
11.9.1.3 Illustrate how supply and demand influence price

COMPETENCY 11.9.2: Evaluate personal money management

COMPETENCY BUILDERS:

11.9.2.1 Describe the need for personal management records
11.9.2.2 Identify methods of taxation
11.9.2.3 Analyze how credit affects financial security
11.9.2.4 Compare types and methods of investments
11.9.2.5 Prepare a personal budget
11.9.2.6 Be an informed and responsible consumer
11.9.2.7 Analyze the effects of advertising on the consumer

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UNIT 11: Employability Skills

SUBUNIT 11.10: Balancing Work and Family

COMPETENCY 11.10.1: Analyze the effects of family on work

COMPETENCY BUILDERS:

11.10.1.1 Recognize how family values, goals, and priorities are reflected in the workplace
11.10.1.2 Identify present and future family structures and responsibilities
11.10.1.3 Describe personal and family roles
11.10.1.4 Analyze concerns of working parent(s)
11.10.1.5 Examine how family responsibilities can conflict with work
11.10.1.6 Resolve family-related conflicts
11.10.1.7 Explain how to use support systems/community resources to help resolve family-related conflicts

COMPETENCY 11.10.2: Analyze the effects of work on family

COMPETENCY BUILDERS:

11.10.2.1 Identify responsibilities associated with paid and nonpaid work
11.10.2.2 Compare the advantages and disadvantages of multiple incomes
11.10.2.3 Examine how work can conflict with family responsibilities
11.10.2.4 Describe how work-related stress can affect families
11.10.2.5 Identify family support systems and resources

UNIT 11: Employability Skills

SUBUNIT 11.11: Citizenship in the Workplace

COMPETENCY 11.11.1: Exercise the rights and responsibilities of citizenship in the workplace

COMPETENCY BUILDERS:

11.11.1.1 Identify the basic rights and responsibilities of citizenship
11.11.1.2 Examine the history and contributions of all racial, ethnic, and cultural groups

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COMPETENCY 11.11.2: Cooperate with others in the workplace

COMPETENCY BUILDERS:

11.11.2.1 Identify situations in which compromise is necessary
11.11.2.2 Examine how individuals from various backgrounds contribute to work-related situations
11.11.2.3 Demonstrate initiative to facilitate cooperation
11.11.2.4 Give and receive constructive criticism to enhance cooperation

UNIT 11: Employability Skills

SUBUNIT 11.12: Leadership

COMPETENCY 11.12.1: Evaluate leadership styles appropriate for the workplace

COMPETENCY BUILDERS:

11.12.1.1 Identify characteristics of effective leaders
11.12.1.2 Compare leadership styles
11.12.1.3 Demonstrate effective delegation skills
11.12.1.4 Identify opportunities to lead in the workplace

COMPETENCY 11.12.2: Demonstrate effective teamwork skills

COMPETENCY BUILDERS:

11.12.2.1 Identify the responsibilities of a valuable group member
11.12.2.2 Exhibit open-mindedness
11.12.2.3 Identify methods of involving each member of a team
11.12.2.4 Contribute to the efficiency and success of a group
11.12.2.5 Determine ways to motivate others

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COMPETENCY 11.12.3: Utilize effective communication skills

COMPETENCY BUILDERS:

11.12.3.1 Demonstrate the importance of listening
11.12.3.2 Demonstrate assertive communication
11.12.3.3 Recognize the importance of verbal and nonverbal cues and messages
11.12.3.4 Analyze written material
11.12.3.5 Prepare written material
11.12.3.6 Give and receive feedback
11.12.3.7 Articulate thoughts
11.12.3.8 Use appropriate language

UNIT 11: Employability Skills

SUBUNIT 11.13: Entrepreneurship

COMPETENCY 11.13.1: Evaluate the role of small business in the economy

COMPETENCY BUILDERS:

11.13.1.1 Identify the benefits of small business to a community
11.13.1.2 Analyze opportunities for small business in a community

COMPETENCY 11.13.2: Examine considerations of starting a business

COMPETENCY BUILDERS:

11.13.2.1 Research a business idea
11.13.2.2 Compare various ways to become a small business owner
11.13.2.3 Investigate factors to consider in financing a new business
11.13.2.4 Evaluate entrepreneurship as a career option

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